

TED (10) – 5061

(REVISION – 2010)

Reg. No.

Signature

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

ADVANCED DATABASE MANAGEMENT SYSTEMS

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer all questions in one or two sentences. Each question carries 2 marks.

1. Define the terms entity and attribute.
2. What is checkpoint ?
3. List the phases in Two Phase Locking protocol.
4. Define data mining.
5. State the difference between transient object and persistent object.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Describe internal hashing with diagram.
2. Illustrate shadow paging with diagram.
3. Describe the security issues in databases.
4. Describe the phases in KDD.
5. Discuss the functionalities of a data warehouse.
6. Describe the phases in distributed query processing.
7. Describe data replication and fragmentation.

(5×6 = 30)

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

III Explain heap files and sorted files. 15

OR

IV (a) Explain the hierarchy of storage devices. 9

(b) Describe any six operations on files. 6

UNIT — II

V Explain concurrency control based on timestamp ordering. 15

OR

VI (a) Explain database recovery techniques based on deferred update. 10

(b) Describe validation techniques for concurrency control. 5

UNIT — III

VII (a) Explain the goals of data mining. 10

(b) Write a note on commercial data mining tools. 5

OR

VIII (a) List the characteristics of data warehouses. 7

(b) Discuss the applications of data mining. 8

UNIT — IV

IX (a) Explain about transparency in distributed DBMS. 8

(b) Explain parallel database system architectures. 7

OR

X (a) Discuss the advantages of distributed database system. 8

(b) Write a note on mobile databases. 7